

Notice of Allowability

Application No.

09/681,266

Examiner

James S. Wozniak

Applicant(s)

MILLER, STEVEN C.

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/21/2005.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION

Response to Amendment

1. In response to the office action from 9/6/2005, the applicant has submitted a request for continued examination, filed 9/21/2005, amending claims 1, 2, 7, 13, 15, 20, and 23, while arguing to traverse the art rejection based on the amended limitations (*Amendment, Page 7*). Applicant's arguments have been fully considered, and claims 1-24 are allowable over the prior art of record for the reasons given below with respect to the examiner's amendment.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Bianco (*Reg. No. 51,471*) on 12/12/2005.

3. The application has been amended as follows:

In claim 1, line 13, add the following after "recognized by said system control and speech recognition processor":

--, wherein the display also displays a current medical imaging device function that is assigned to one of the plurality of foot input devices—.

In claim 7, lines 9-10, change “a display for continuously displaying the current function assigned to each foot input device” to:

-- a display for continuously displaying a current function assigned to each foot input device, wherein the current function is a medical imaging device function--.

In claim 13, line 11 add the following after “recognized by said system control and speech recognition processor”:

--, wherein the display also displays a current medical imaging device function that is assigned to one of the plurality of foot input devices—.

In claim 20, lines 10-11 change “displaying visual confirmation that said second verbal command was successfully recognized; and” to --displaying visual confirmation that said second verbal command was successfully recognized;-- and add the following after the aforementioned limitation:

--displaying a current medical imaging function assigned to one of the plurality of foot input devices; and--.

In claim 23, line 8 change “displaying the current function assigned to each foot input device; and” to --displaying a current function assigned to each foot input device, wherein the current function is a medical imaging device function; and--.

Allowable Subject Matter

4. Claims 1-24 are allowable over the prior art of record.
5. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1, 7, 13, 20, and 23**, the prior art of record fails to explicitly teach or fairly suggest a speech recognition system and method for assigning functions to foot inputs of a medical imaging device, wherein a user speaks the name of a verbal command relating to a medical imaging function prior to speaking the name of a foot input device (*pedal*), the system assigns the spoken medical imaging function to the requested foot input device, and a display shows successful recognition results and current functions that are assigned to each foot input device. The medical imaging device then performs the assigned function when a user operates the corresponding foot input device.

Although Wang et al (*U.S. Patent: 6,642,836*) teaches a system for speech control of medical devices utilizing a display for speech recognition verification and a foot input device (*Col. 5, Lines 19-37; Col. 8, Lines 21-46; and Col. 2, Lines 33-51*), Wang does not teach assigning a speech command to a particular foot input device nor displaying a currently assigned foot input device function. Also, Wang relies on the use of speech commands as a substitute for a foot input device, while the present invention controls assigned spoken functions by using a corresponding foot input device.

Although Greenberg (*U.S. Patent: 6,514,201*) teaches the ability to assign a spoken ultrasound imaging device function to an input device (*Col. 10, Lines 27-54; Fig. 19*), Greenberg

does not teach a foot input device, nor a display for speech recognition verification and function assignment indications. Also, while Greenberg teaches selecting a function via a speech command, Greenberg does not specifically teach how an input device is selected for function assignment, and thus, does not explicitly teach the claimed “second verbal command” corresponding to a foot input device name.

Although Brant et al (*U.S. Patent: 6,278,975*) teaches speech control of a medical imaging device (*Col. 10, Lines 33-64*), Brant fails to teach assigning a verbal command corresponding to a medical imaging function to a foot input device and using the foot input device having the assigned function to control a medical imaging device. Brant also does not teach the display of speech recognition verifications and function assignment indications.

The dependent claims further limit allowable independent claims, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


Blume et al (*U.S. Patent: 6,157,853*)- teaches speech control of medical imaging systems having a display for operation confirmations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
12/12/2005


SUSAN MCFADDEN
PRIMARY EXAMINER